

ABSTRACT OF THE DISCLOSURE

A method and structure for a complementary metal oxide semiconductor active pixel sensor device having a photodetector, a sensing node electrically connected to the photodetector, an output connected to the
5 photodetector, and a voltage-independent capacitance device connected between the sensing node and the output. The voltage-independent capacitance device provides a capacitance independently of a voltage on the sensing node. The voltage-independent capacitance device can be a voltage-independent capacitor, an electrode-electrode capacitor, or a common source amplifier and should have a
10 capacitance larger than the capacitance of the sensing node. The voltage-independent capacitance device lowers an overall voltage-dependent capacitance of the APS.